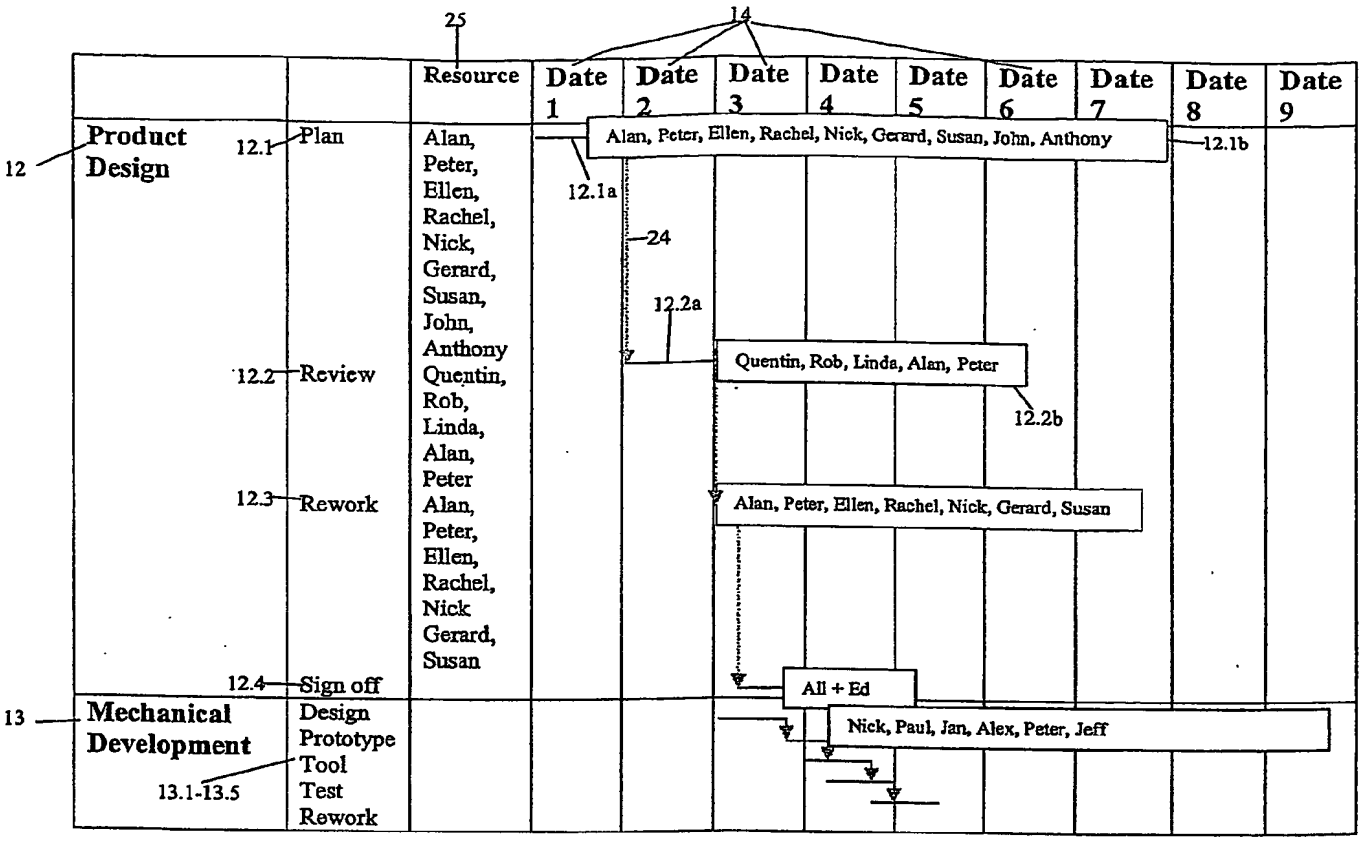
25
14
Resource
Date 1
Date 2
Date 3
Date 4
Date 5
Date 6
Date 7
Date 8
Date 9
12
Product Design
12.1
Plan
Alan, Peter, Ellen, Rachel, Nick, Gerard, Susan, John, Anthony
Alan, Peter, Ellen, Rachel, Nick, Gerard, Susan, John, Anthony
12.1a
12.1b
24
12.2a
12.2
Review
Quentin, Rob, Linda, Alan, Peter
Quentin, Rob, Linda, Alan, Peter
12.2b
12.3
Rework
Alan, Peter, Ellen, Rachel, Nick, Gerard, Susan
Alan, Peter, Ellen, Rachel, Nick, Gerard, Susan
12.4
Sign off
All + Ed
13
Mechanical Development
Design
Prototype
Tool
Test
Rework
13.1-13.5
Nick, Paul, Jan, Alex, Peter, Jeff

Figure 1

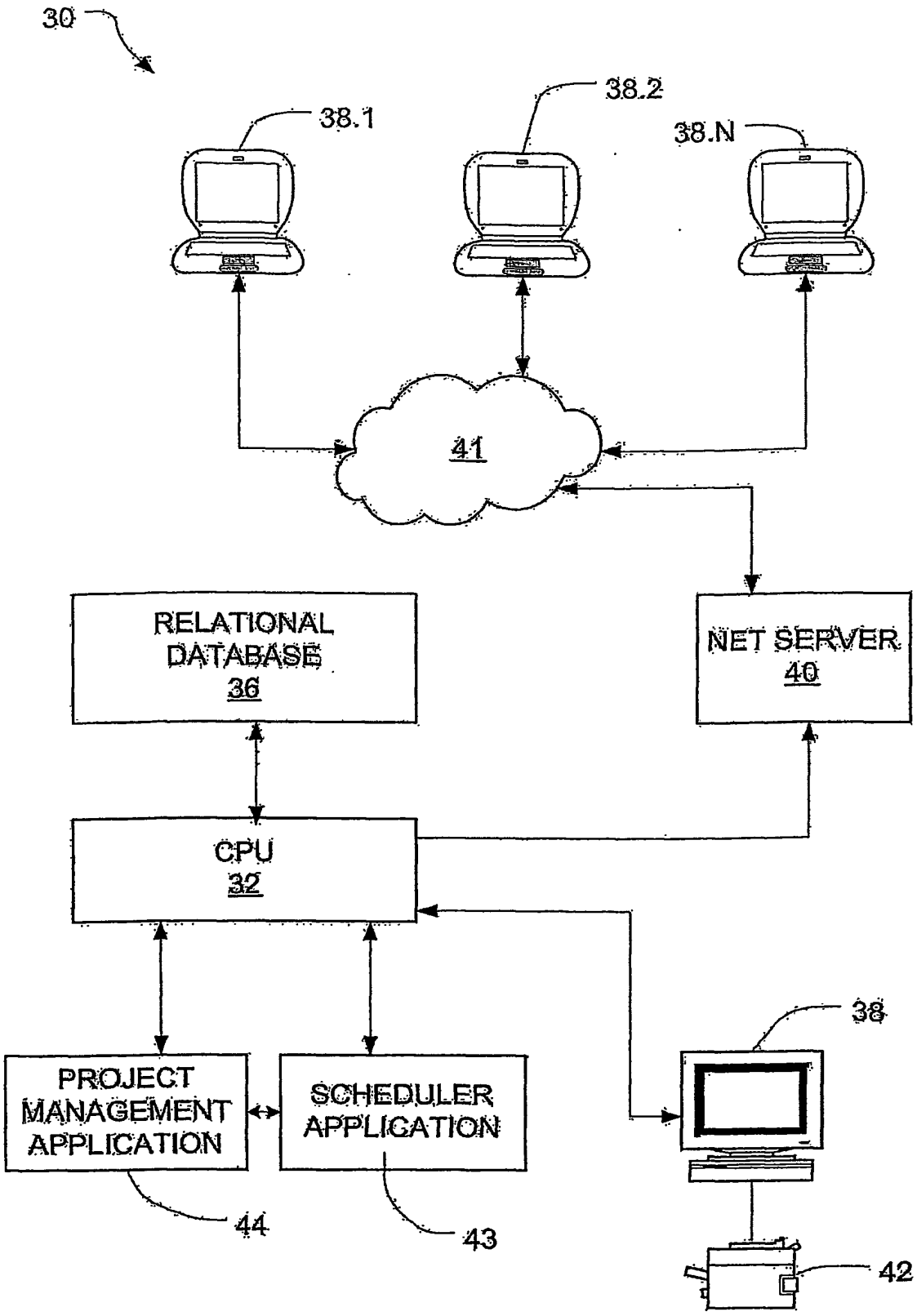
30
38.1
38.2
38.N
41
RELATIONAL DATABASE 36
NET SERVER 40
CPU 32
PROJECT MANAGEMENT APPLICATION
SCHEDULER APPLICATION
44
43
38
42

Figure 2

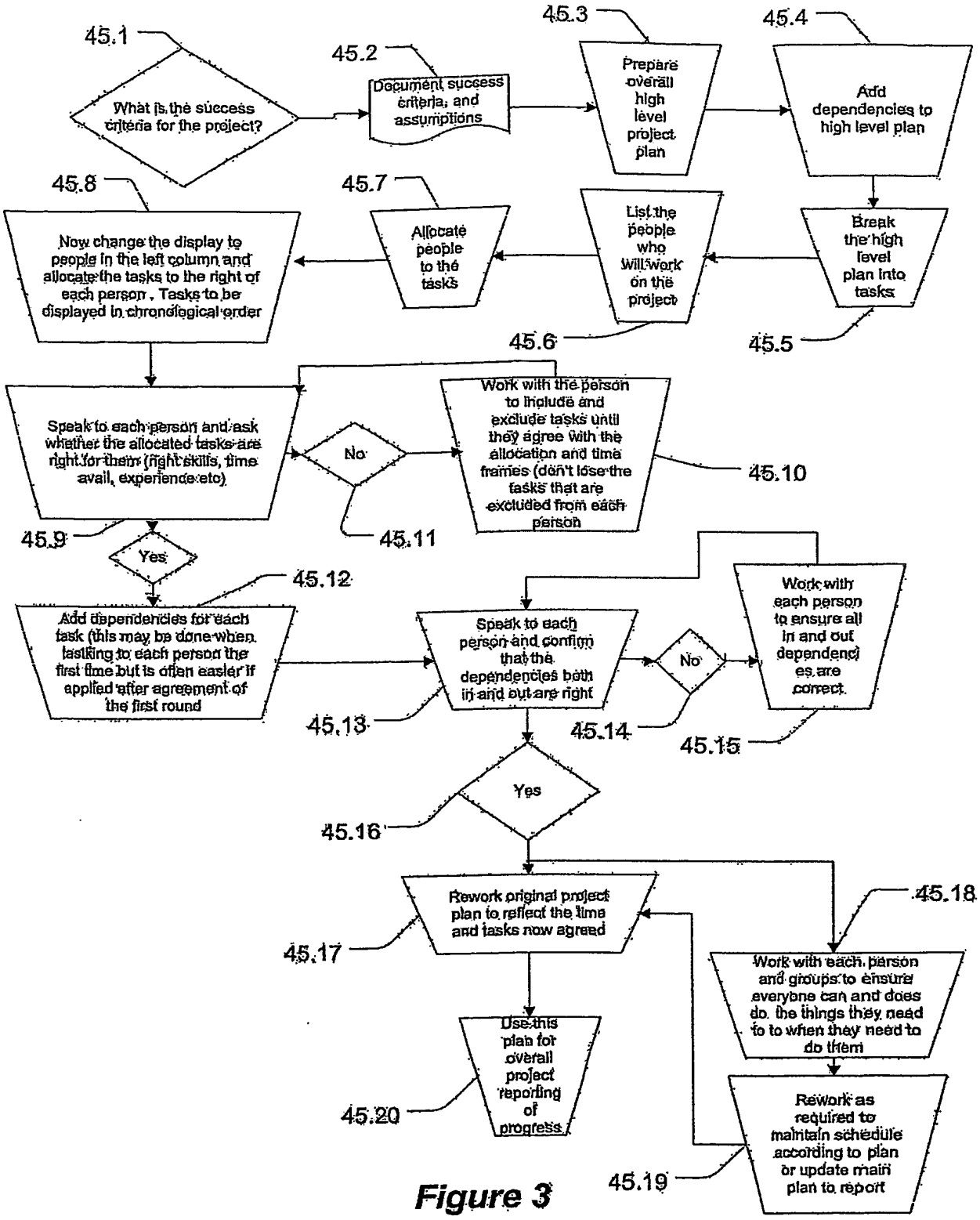
45.1
What is the success criteria for the project?
45.2
Document success criteria, and assumptions
45.3
Prepare overall high level project plan
45.4
Add dependencies to high level plan
45.5
Break the high level plan into tasks
45.6
List the people who will work on the project
45.7
Allocate people to the tasks
45.8
Now change the display to people in the left column and allocate the tasks to the right of each person . Tasks to be displayed in chronological order
Speak to each person and ask whether the allocated tasks are right for them (right skills, time avail, experience etc)
No
45.10
Work with the person to include and exclude tasks until they agree with the allocation and time frames (don't lose the tasks that are excluded from each person
45.11
45.9
Yes
45.12
Add dependencies for each task (this may be done when talking to each person the first time but is often easier if applied after agreement of the first round
Speak to each person and confirm that the dependencies both in and out are right
No
Work with each person to ensure all in and out dependencies are correct
45.13
45.14
45.15
Yes
45.16
Rework original project plan to reflect the time and tasks now agreed
45.17
45.18
Work with each person and groups to ensure everyone can and does do the things they need to to when they need to do them
Use this plan for overall project reporting of progress
45.20
Rework as required to maintain schedule according to plan or update main plan to report
45.19

Figure 3

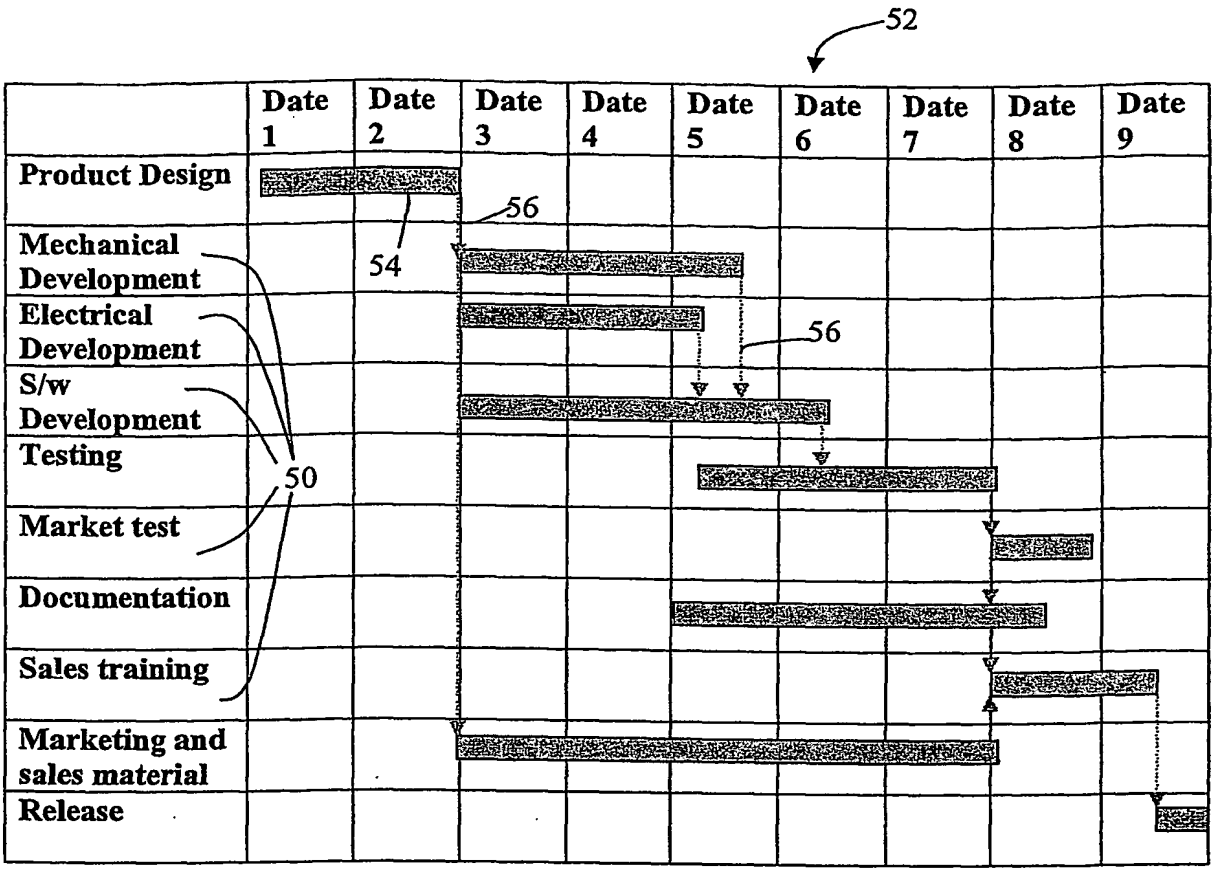
52
Date 1
Date 2
Date 3
Date 4
Date 5
Date 6
Date 7
Date 8
Date 9
Product Design
Mechanical Development
Electrical Development
S/w Development
Testing
Market test
Documentation
Sales training
Marketing and sales material
Release
50
54
56
56

Figure 3a

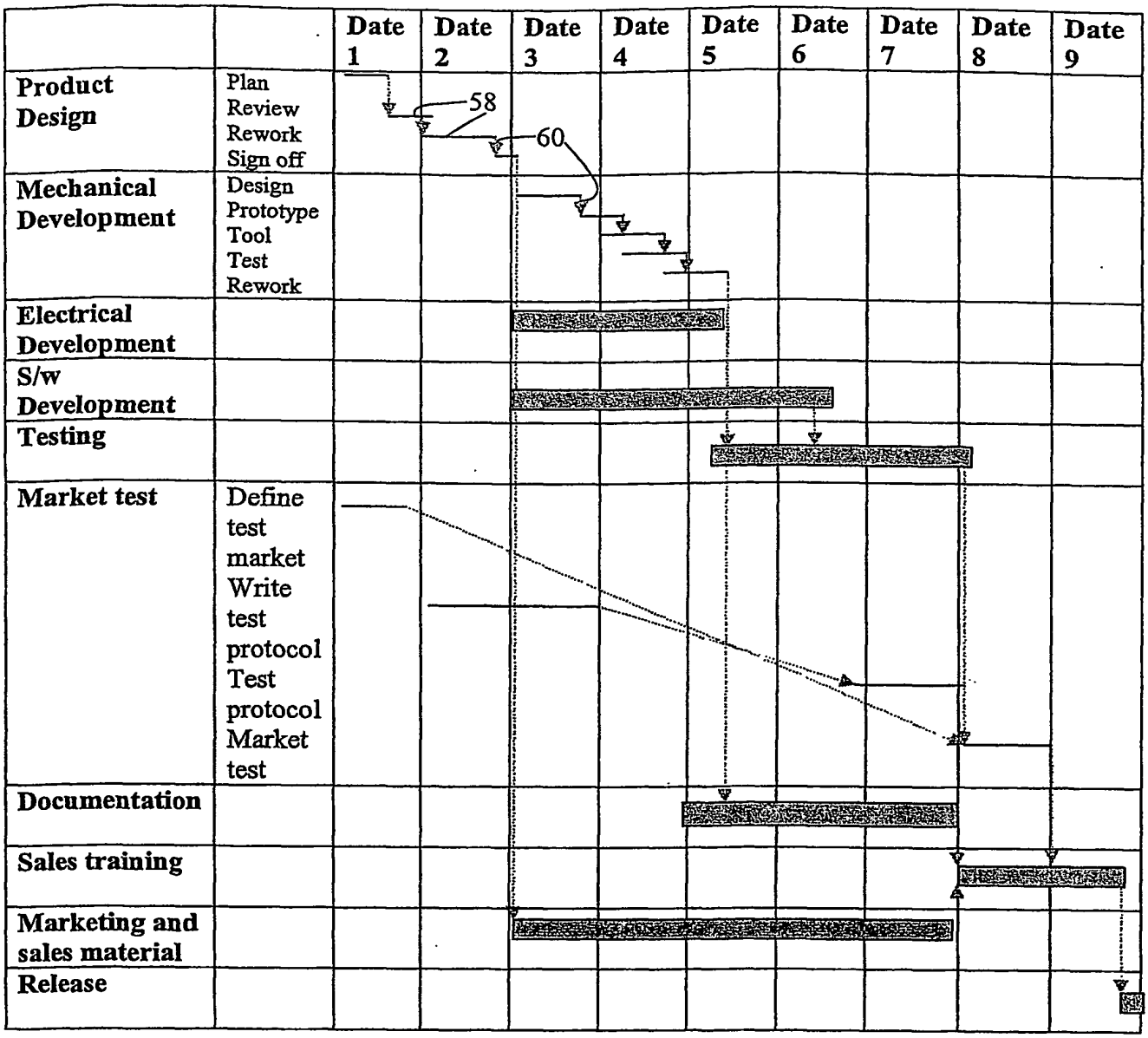
Date 1
Date 2
Date 3
Date 4
Date 5
Date 6
Date 7
Date 8
Date 9
Product Design
Plan
Review
Rework
Sign off
58
60
Mechanical Development
Design
Prototype
Tool
Test
Rework
Electrical Development
S/w Development
Testing
Market test
Define test market
Write test protocol
Test protocol
Market test
Documentation
Sales training
Marketing and sales material
Release

Figure 3b

62 64

	Date 1	Date 2	Date 3	Date 4	Date 5	Date 6	Date 7	Date 8	Date 9
Rob		Product review	Sign off						
Linda		Product review Write market test protocol	Sign off Write market test protocol Marketing and sales material	Write market test protocol Marketing and sales material	Testing Marketing and sales material	Testing Marketing and sales material	Testing Marketing and sales material	Market Test	
Ed			Sign off						
Ian									
Alan	Product design	Product review	Design rework Sign off						
Ellen	Product design		Design rework Sign off		Testing	Testing	Testing Test market protocol		
Nick	Product design		Design rework Sign off Mech Design Elec design Board layout Prototype Test Rework Release	Elec design Board layout Prototype Test Rework Release	Elec design Board layout Prototype Test Rework Release				
Sukumar			S/w Design Dev Testing Release	S/w Design Dev Testing Release	S/w Design Dev Testing Release Testing	S/w Design Dev Testing Release Testing	Testing		
Susan	Product design		Design rework Sign off						
Gerard	Product design		Design rework Sign off		Testing				
John	Product design		Sign off S/w Design Dev Testing Release	S/w Design Dev Testing Release	S/w Design Dev Testing Release Testing	S/w Design Dev Testing Release Testing	Testing Test market protocol		
Alex			Mech Design						

66

68

Figure 3c

	Date 1	Date 2	Date 3	Date 4	Date 5	Date 6	Date 7	Date 8	Date 9
Rob		Product review	Sign off						
Linda	70	Product review Define test market Write market test protocol	Sign off Write market test protocol Marketing and sales material	Write market test protocol Marketing and sales material	Testing Marketing and sales material 72	Testing Marketing and sales material	Testing Marketing and sales material	Market Test	
Ed			Sign off						
Ian									
Alan	Product design	Product review	Design rework Sign off						
Ellen	Product design		Design rework Sign off		Testing	Testing	Testing Test market protocol		
Nick	Product design		Design rework Sign off Mech Design Elec design Board layout Prototype Test Rework Release	Elec design Board layout Prototype Test Rework Release	Elec design Board layout Prototype Test Rework Release				
Sukumar			S/w Design Dev Testing Release	S/w Design Dev Testing Release	S/w Design Dev Testing Release Testing	S/w Design Dev Testing Release Testing	Testing		
Susan	Product design		Design rework Sign off						
Gerard	Product design		Design rework Sign off		Testing				

Figure 3d

Date	Project plan task	Task
2	Review the product design	Review the product design
3	Sign off the product design	Sign off product design
2	Define the test market	get the marketing and field people together to jointly decide as it will need to fit into their schedule
2	Define the test market	Review the overall market release strategy
2	Define the test market	review the release plans
2	Define the test market	determine which is the best way to test the market
3	Market test protocol	determine the numbers required
2	Define the test market	write up the test market profile
3	Define the test market	get sign off from marketing and field people.
3	Market test protocol	Draft the market test protocol
3	Market test protocol	Review protocol with field staff
3	Market test protocol	Finalise market test protocol
4	Marketing and sales material	Hold brainstorming session re marketing and sales material – invite, field, sales, marketing staff and Ed.
4,5	Marketing and sales material	Get Pam to mock up some materials
5	Marketing and sales material	Hold review meeting
6	Marketing and sales material	Get Pam to contact suppliers for quotes and samples
6	Marketing and sales material	Get field and marketing and sales to estimate how many copies of each type of material they will require.
7	Marketing and sales material	Review samples
6	Marketing and sales material	Place quantities and locations in the distribution system
7	Marketing and sales material	Prepare budget for materials
7	Marketing and sales material	Get budget approval from Ed
7	Marketing and sales material	Place orders
9	Marketing and sales material	Check deliveries and authorize payments
9	Marketing and sales material	Place materials in store for distribution

Figure 3e

	Date 1	Date 2	Date 3	Date 4	Date 5	Date 6	Date 7	Date 8	Date 9	Date 10	Date 11
Linda		Product review Define test market	Sign off Write market test protocol	Marketing and sales material	Marketing and sales material	Marketing and sales material	Marketing and sales material	Market Test	Market Test	Market Test	

Figure 3f

	Date 1	Date 2	Date 3	Date 4	Date 5	Date 6	Date 7	Date 8	Date 9	Date 10	Date 11
Rob		Product review	Sign off								
Linda		Product review Define test market	Sign off Write market test protocol	Marketing and sales material	Marketing and sales material	Marketing and sales material	Marketing and sales material	Market Test	Market Test	Market Test	
Ed			Sign off								
Ian											
Alan	Product design	Product review	Design rework Sign off								
Ellen	Product design		Design rework Sign off		Testing	Testing	Testing Test market protocol				
Nick	Product design		Design rework Sign off Mech Design Elec design Board layout Prototype Test Rework Release	Elec design Board layout Prototype Test Rework Release	Elec design Board layout Prototype Test Rework Release						
Sukumar			S/w Design Dev Testing Release	S/w Design Dev Testing Release	S/w Design Dev Testing Release Testing	S/w Design Dev Testing Release Testing	Testing				
Susan	Product design		Design rework Sign off		Testing	Testing	Testing				
Gerard	Product design		Design rework Sign off		Testing						

Figure 3g

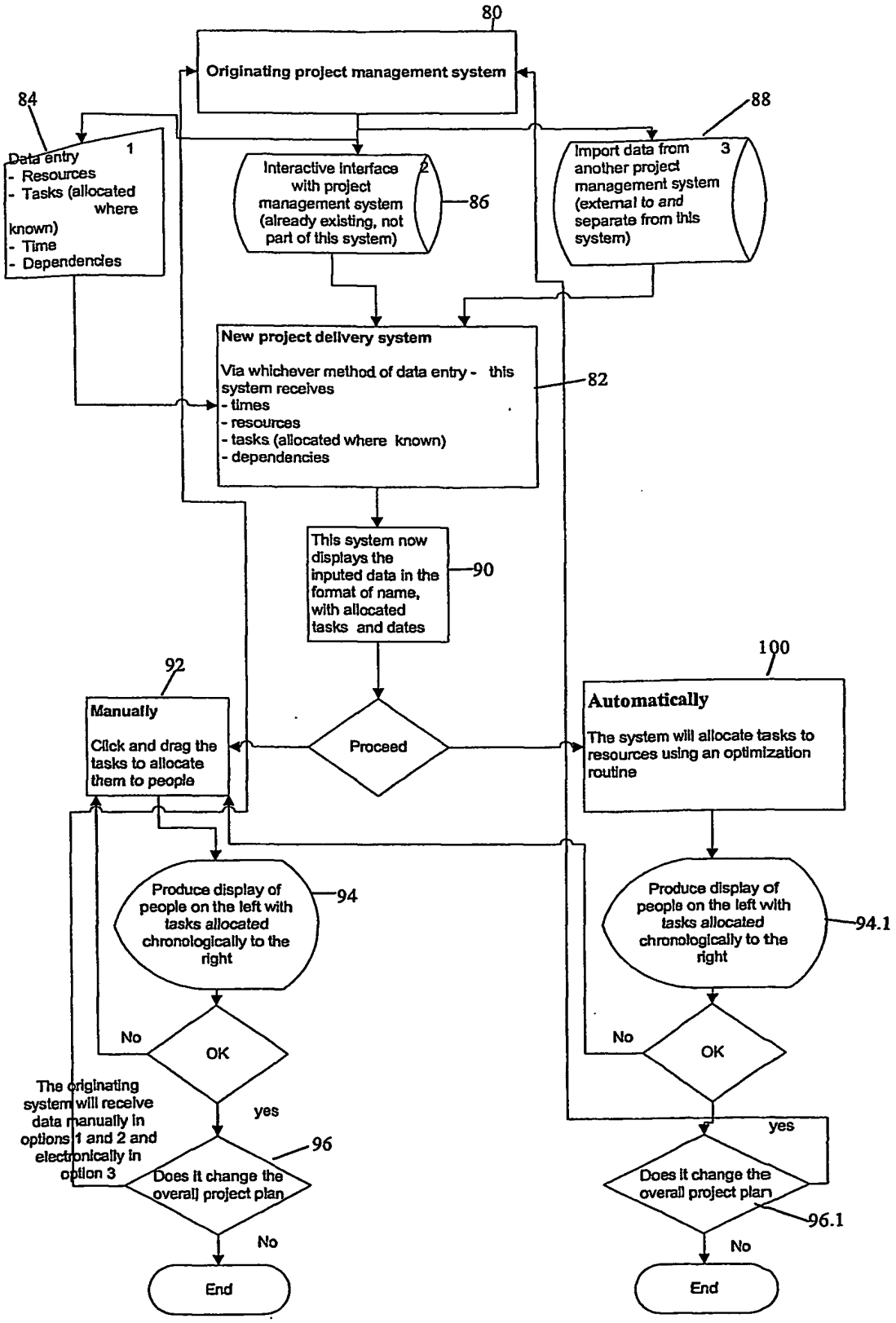
80
Originating project management system
84
88
Data entry 1
- Resources
- Tasks (allocated where known)
- Time
- Dependencies
Interactive interface with project management system (already existing, not part of this system) 2
86
Import data from another project management system (external to and separate from this system) 3
New project delivery system
Via whichever method of data entry - this system receives
- times
- resources
- tasks (allocated where known)
- dependencies
82
This system now displays the inputed data in the format of name, with allocated tasks and dates
90
92
100
Manually
Click and drag the tasks to allocate them to people
Proceed
Automatically
The system will allocate tasks to resources using an optimization routine
Produce display of people on the left with tasks allocated chronologically to the right
94
Produce display of people on the left with tasks allocated chronologically to the right
94.1
No
OK
yes
No
OK
yes
The originating system will receive data manually in options 1 and 2 and electronically in option 3
96
Does it change the overall project plan
Does it change the overall project plan
96.1
No
No
End
End

Figure 4

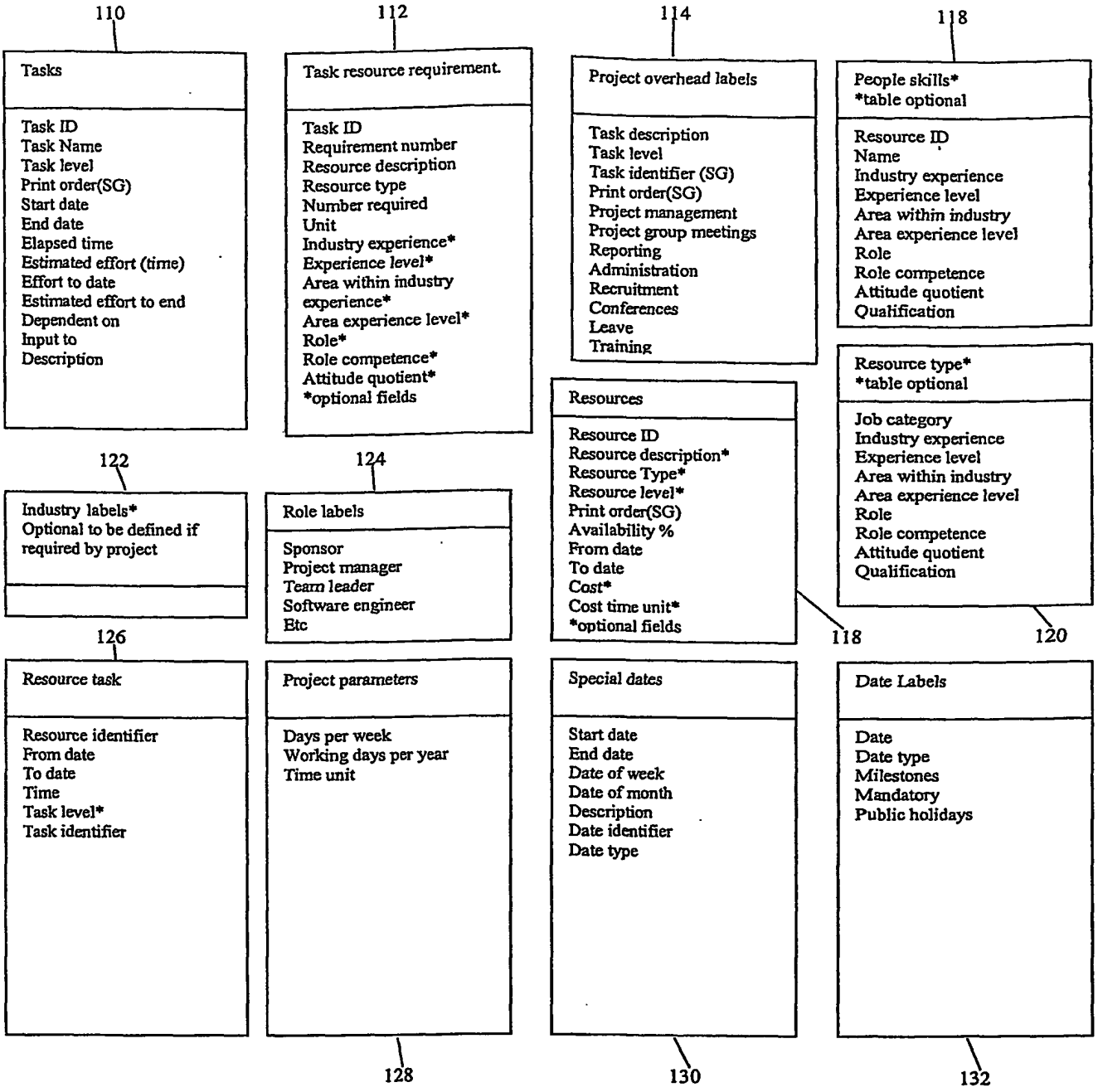
110
Tasks
Task ID
Task Name
Task level
Print order(SG)
Start date
End date
Elapsed time
Estimated effort (time)
Effort to date
Estimated effort to end
Dependent on
Input to
Description
112
Task resource requirement
Task ID
Requirement number
Resource description
Resource type
Number required
Unit
Industry experience*
Experience level*
Area within industry experience*
Area experience level*
Role*
Role competence*
Attitude quotient*
*optional fields
114
Project overhead labels
Task description
Task level
Task identifier (SG)
Print order(SG)
Project management
Project group meetings
Reporting
Administration
Recruitment
Conferences
Leave
Training
118
People skills*
*table optional
Resource ID
Name
Industry experience
Experience level
Area within industry
Area experience level
Role
Role competence
Attitude quotient
Qualification
Resources
Resource ID
Resource description*
Resource Type*
Resource level*
Print order(SG)
Availability %
From date
To date
Cost*
Cost time unit*
*optional fields
118
Resource type*
*table optional
Job category
Industry experience
Experience level
Area within industry
Area experience level
Role
Role competence
Attitude quotient
Qualification
120
122
Industry labels*
Optional to be defined if required by project
124
Role labels
Sponsor
Project manager
Team leader
Software engineer
Etc
126
Resource task
Resource identifier
From date
To date
Time
Task level*
Task identifier
Project parameters
Days per week
Working days per year
Time unit
128
Special dates
Start date
End date
Date of week
Date of month
Description
Date identifier
Date type
130
Date Labels
Date
Date type
Milestones
Mandatory
Public holidays
132

Figure 5

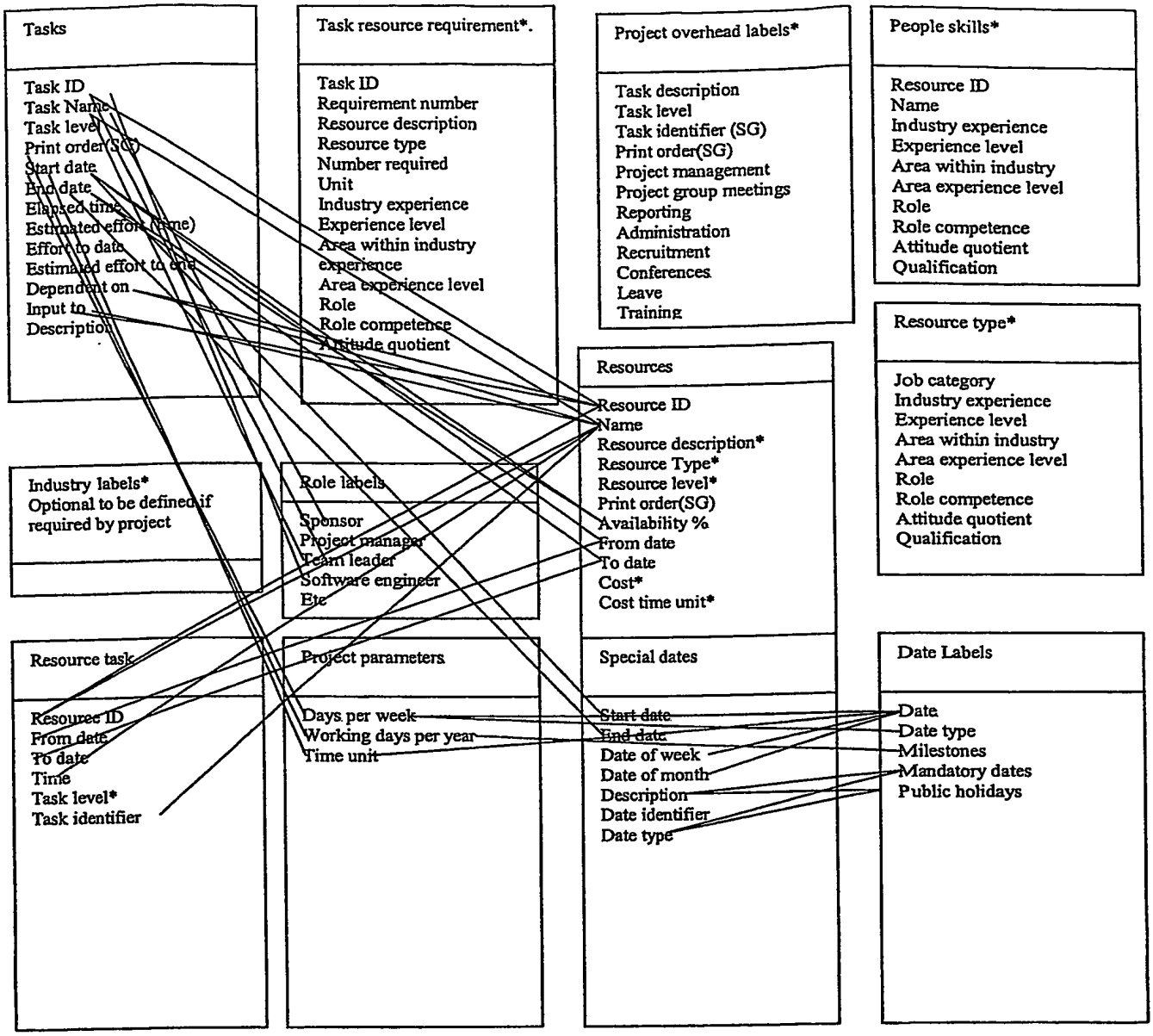
Tasks
Task ID
Task Name
Task level
Print order(SG)
Start date
End date
Elapsed time
Estimated effort (time)
Effort to date
Estimated effort to end
Dependent on
Input to
Description
Task resource requirement*.
Task ID
Requirement number
Resource description
Resource type
Number required
Unit
Industry experience
Experience level
Area within industry experience
Area experience level
Role
Role competence
Attitude quotient
Project overhead labels*
Task description
Task level
Task identifier (SG)
Print order(SG)
Project management
Project group meetings
Reporting
Administration
Recruitment
Conferences
Leave
Training
People skills*
Resource ID
Name
Industry experience
Experience level
Area within industry
Area experience level
Role
Role competence
Attitude quotient
Qualification
Resource type*
Job category
Industry experience
Experience level
Area within industry
Area experience level
Role
Role competence
Attitude quotient
Qualification
Resources
Resource ID
Name
Resource description*
Resource Type*
Resource level*
Print order(SG)
Availability %
From date
To date
Cost*
Cost time unit*
Industry labels*
Optional to be defined if required by project
Role labels
Sponsor
Project manager
Team leader
Software engineer
Etc
Resource task
Resource ID
From date
To date
Time
Task level*
Task identifier
Project parameters
Days per week
Working days per year
Time unit
Special dates
Start date
End date
Date of week
Date of month
Description
Date identifier
Date type
Date Labels
Date
Date type
Milestones
Mandatory dates
Public holidays

Figure 6

Person (resource)	Task	Outstanding (or complete)	Estimated Days (original)	Est. Elapsed Days (original)	Start Planned (Date)	Finish Planned (Date)	Effort (actual to date)	Forecast Est. (now to complete)	Forecast new date (to complete)	Variance
Linda	Product review	Complete	1	1	Date 2	Date 2	1			0
	Define the test market	Complete	3	5	Date 2	Date 2	2			-1
	Sign off	Compete	1	1	Date 3	Date 3	1			0
	Write market test protocol	Outstanding	10	20	Date 3	Date 3	2	8	Date 6	0
	Marketing and sales material	Outstanding	20	80	Date 4	Date 7	4	16	Date 7	0
	Market test	Outstanding	15	60	Date 8	Date 10	0	15	Date 10	0

Figure 7

Task Number	Task	Outstanding (or complete)	Estimated Days (original)	Est. Elapsed Days (original)	Start Planned (Date)	Finish Planned (Date)	Effort (actual to date)	Forecast Est. (now to complete)	Forecast new date (to complete)	Variance
1	Product review	Outstanding	60	140	Date 1	Date 7	33	27	Date 7	0
2	Write market test protocol	Outstanding	40	40	Date 2	Date 3	20	40	Date 4	+20
3	Product design	Complete	40	40	Date 1	Date 2	50			+10
4	Marketing and sales material	Outstanding	50	100	Date 3	Date 7	0	50	Date 7	0
5	Testing	Outstanding	60	60	Date 5	Date 8	10	50	Date 8	0
6	S/w development	Outstanding	70	70	Date 3	Date 6	40	50	Date 9	+20
7	Mechanical Development	Outstanding	50	50	Date 3	Date 5	40	40	Date 7	+30
8	Electrical Development	Outstanding	50	50	Date 3	Date 5	20	40	Date 8	+10
9	Electrical prototype	Outstanding	10	25	Date 4	Date 5	10	10	Date 7	+10

Figure 8

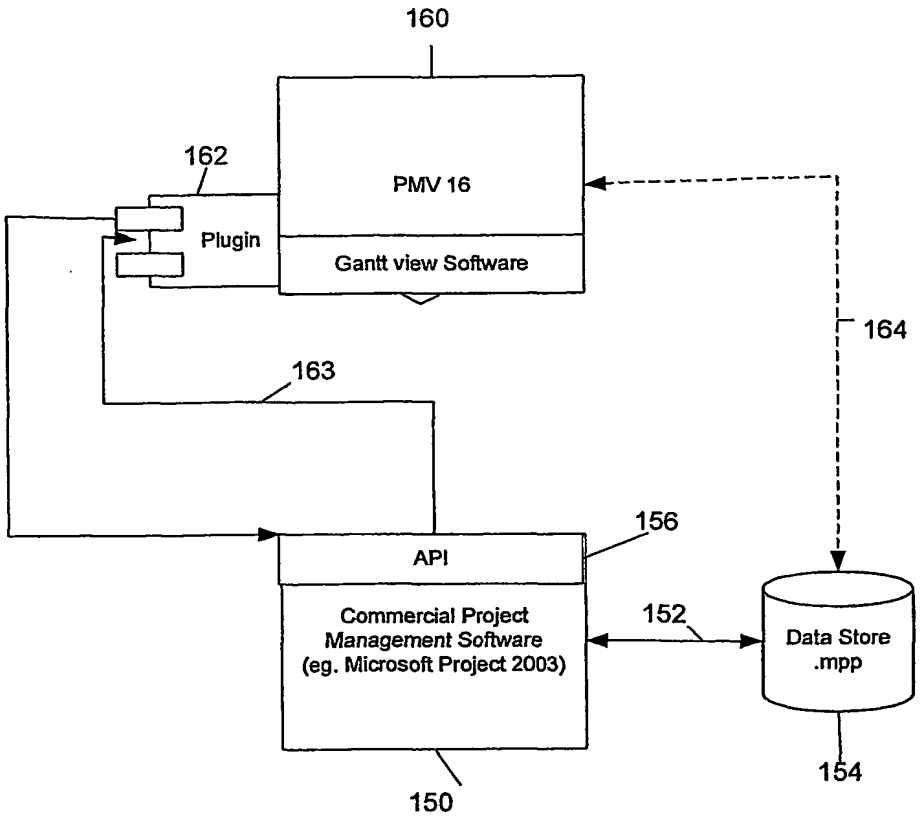
160
PMV 16
162
Plugin
Gantt view Software
164
163
156
API
Commercial Project
Management Software
(eg. Microsoft Project 2003)
152
Data Store
.mpp
154
150

Figure 9

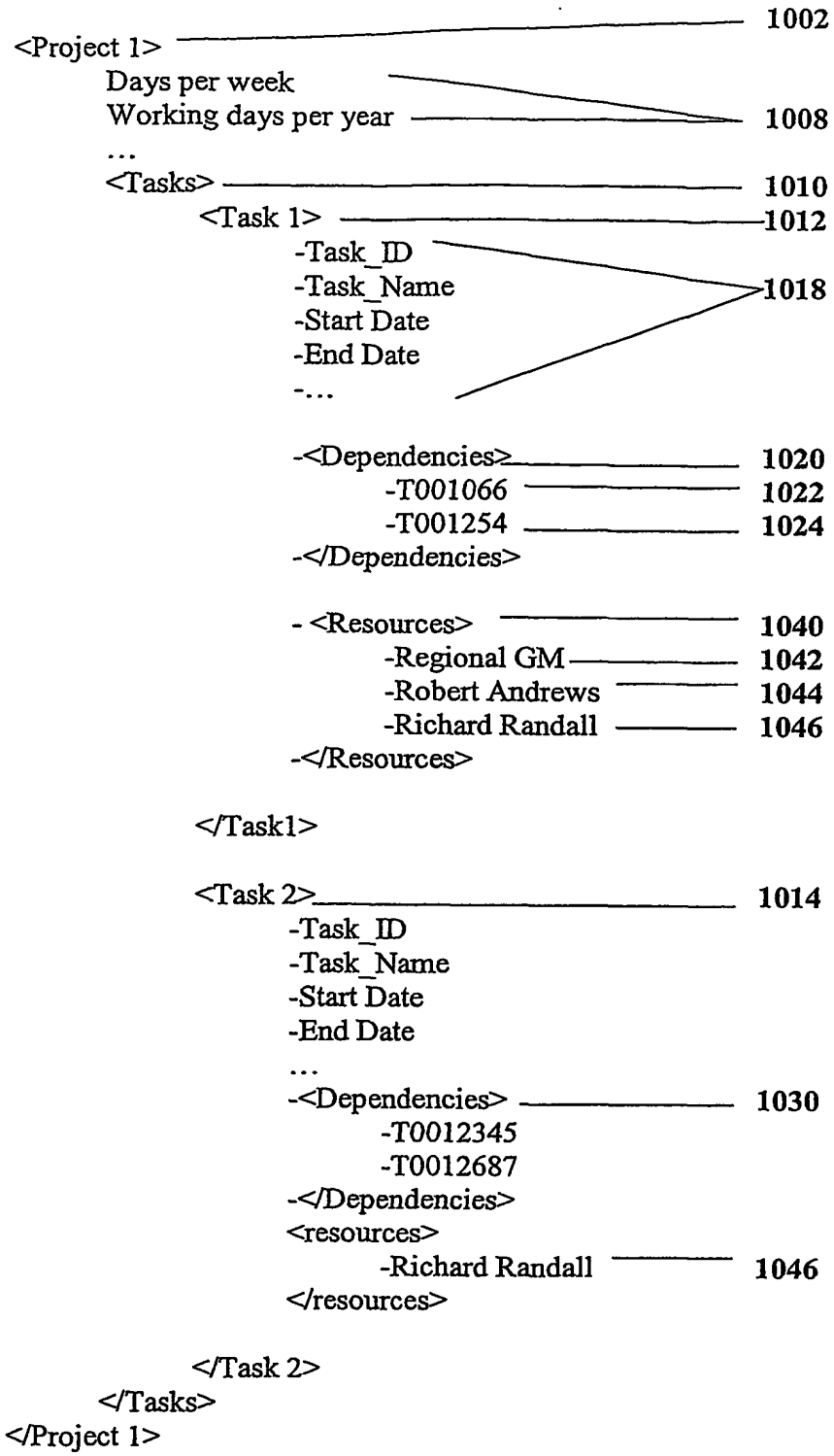
<Project 1> 1002
Days per week
Working days per year 1008
...
<Tasks> 1010
<Task 1> 1012
-Task_ID
-Task_Name 1018
-Start Date
-End Date
-...
-<Dependencies> 1020
-T001066 1022
-T001254 1024
-</Dependencies>
- <Resources> 1040
-Regional GM 1042
-Robert Andrews 1044
-Richard Randall 1046
-</Resources>
</Task1>
<Task 2> 1014
-Task_ID
-Task_Name
-Start Date
-End Date
...
-<Dependencies> 1030
-T0012345
-T0012687
-</Dependencies>
<resources>
-Richard Randall 1046
</resources>
</Task 2>
</Tasks>
</Project 1>

Fig 10

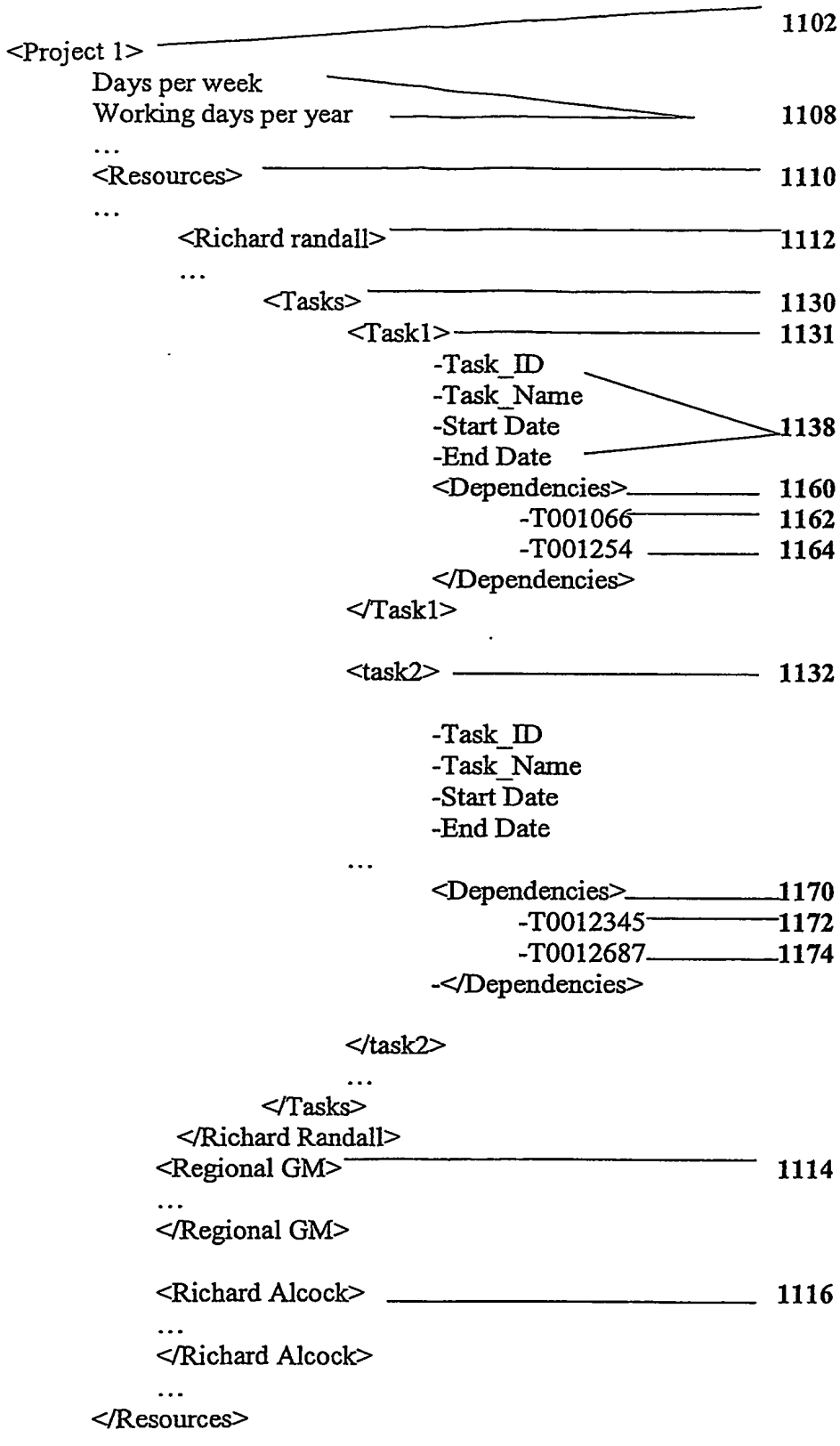
<Project 1>
1102
Days per week
Working days per year
1108
...
<Resources>
1110
...
<Richard randall>
1112
...
<Tasks>
1130
<Task1>
1131
-Task_ID
-Task_Name
-Start Date
-End Date
1138
<Dependencies>
1160
-T001066
1162
-T001254
1164
</Dependencies>
</Task1>
<task2>
1132
-Task_ID
-Task_Name
-Start Date
-End Date
...
<Dependencies>
1170
-T0012345
1172
-T0012687
1174
-</Dependencies>
</task2>
...
</Tasks>
</Richard Randall>
<Regional GM>
1114
...
</Regional GM>
<Richard Alcock>
1116
...
</Richard Alcock>
...
</Resources>
</Project 1>

Fig 11a

```
<Resources> ———————————————————————— 1182
    <Richard Randall> ———————————————— 1112
        <Project 1> ———————————————————— 1185
            ..
            <Tasks>
                <Task1> ———————————— 1131
                    ..
                    <Dependencies>
                        ...
                    </Dependencies>
                </Task1>
                <task2> ———————————— 1132
                    ..
                    <Dependencies>
                        ...
                    </Dependencies>
                </task2>
                ...
            </Tasks>
        </Project 1>

        <Project 2> ———————————————————— 1186
            ...
            <Tasks>
                <Task200> ———————————— 1187
                    ...
                </Task200>

                <Dependencies>
                    ...
                </Dependencies>
            </Tasks>
        </Project2>
    <Richard Randall>
    ...
<Resources>
```

Fig 11b

FIG. 12a

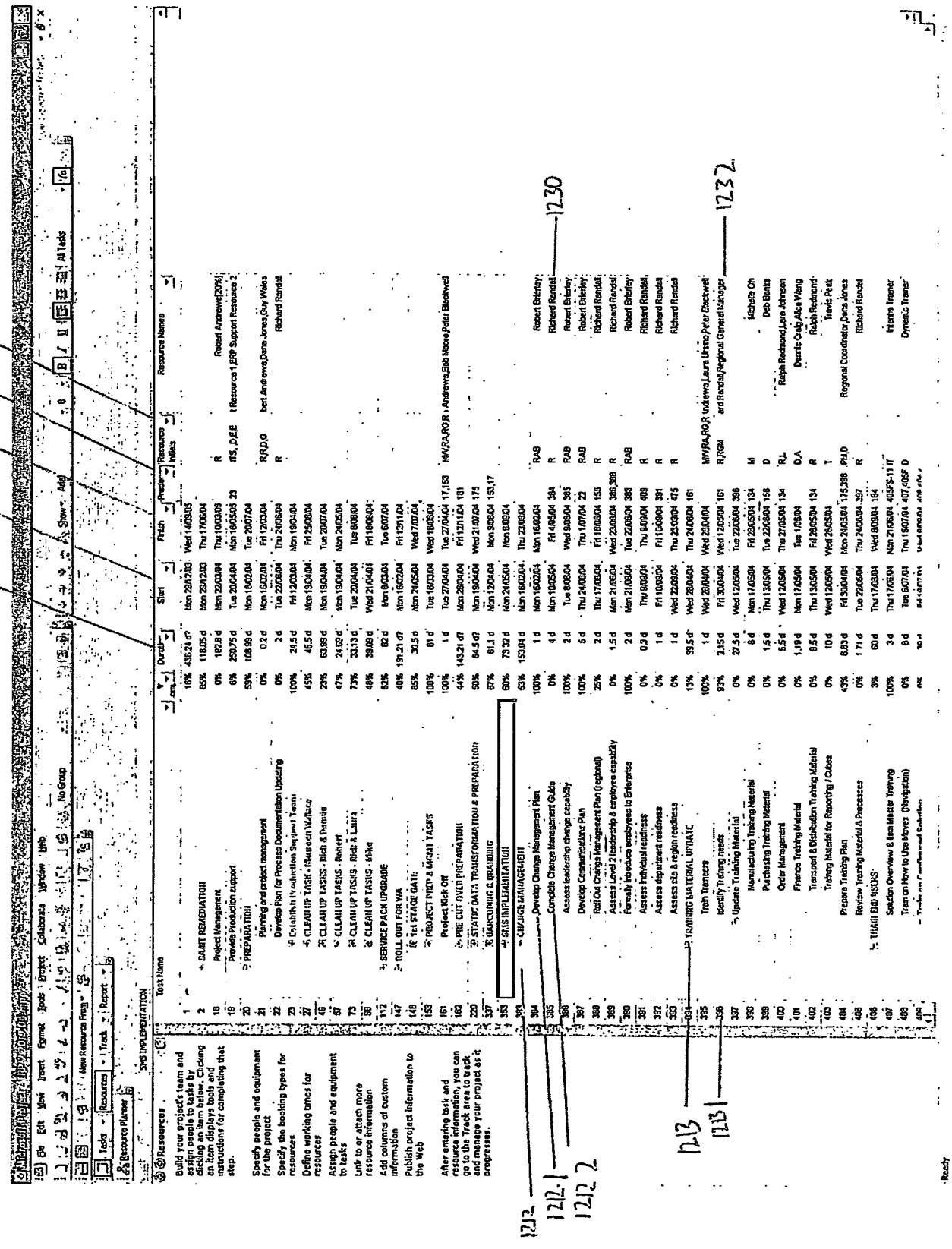
1214
1216
1218
1220
1222
1230
1232
1212
1212.1
1212.2
1213
1213.1
Build your project's team and assign people to tasks by clicking an item below. Clicking an item displays tools and instructions for completing that step.
Specify people and equipment for the project
Specify the booking types for resources
Define working times for resources
Assign people and equipment to tasks
Link to or attach more resource information
Add columns of custom information
Publish project information to the Web
After entering task and resource information, you can go to the Track area to track and manage your project as it progresses.
Ready

FIG. 12b

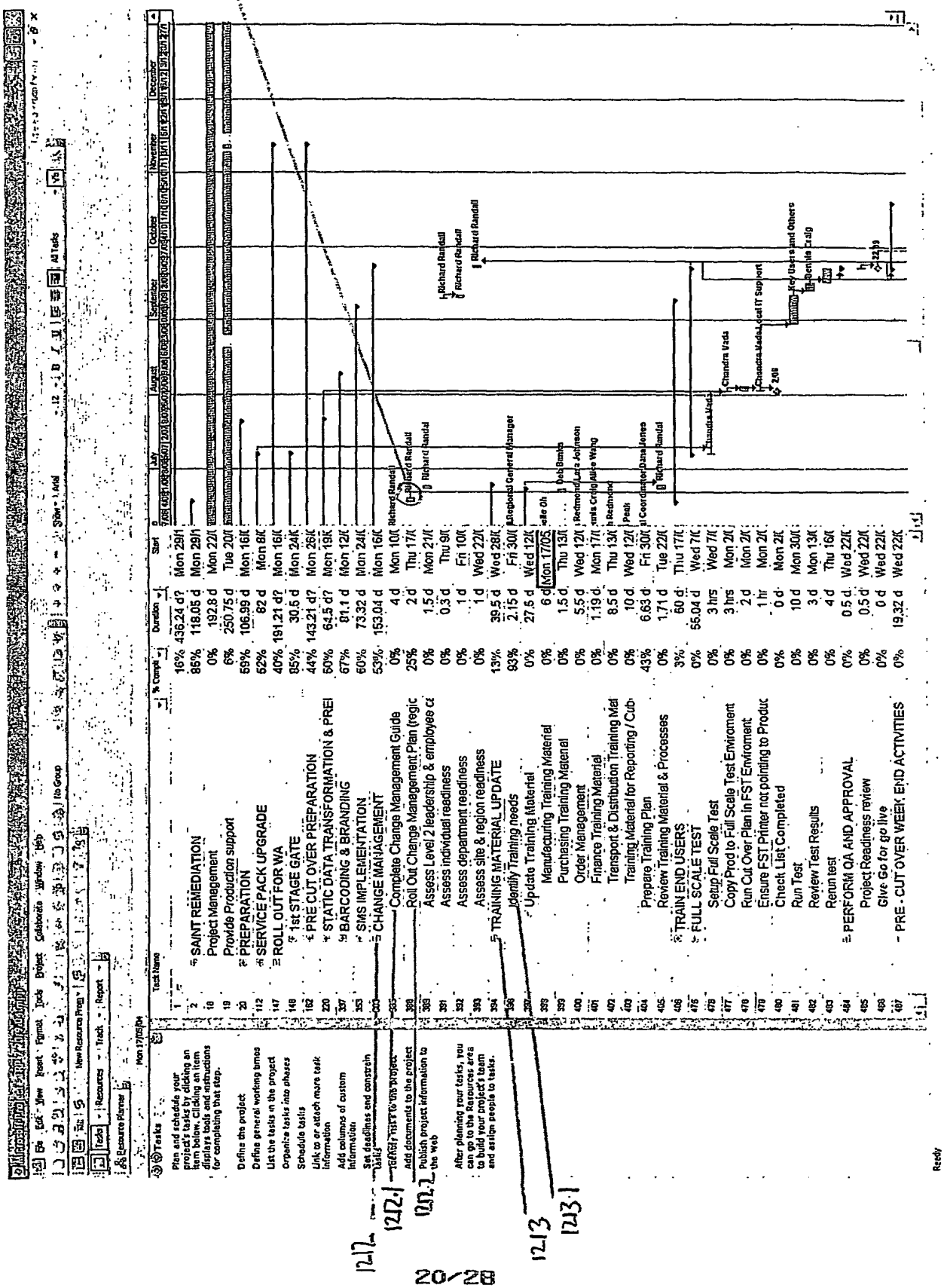

FIG. 13

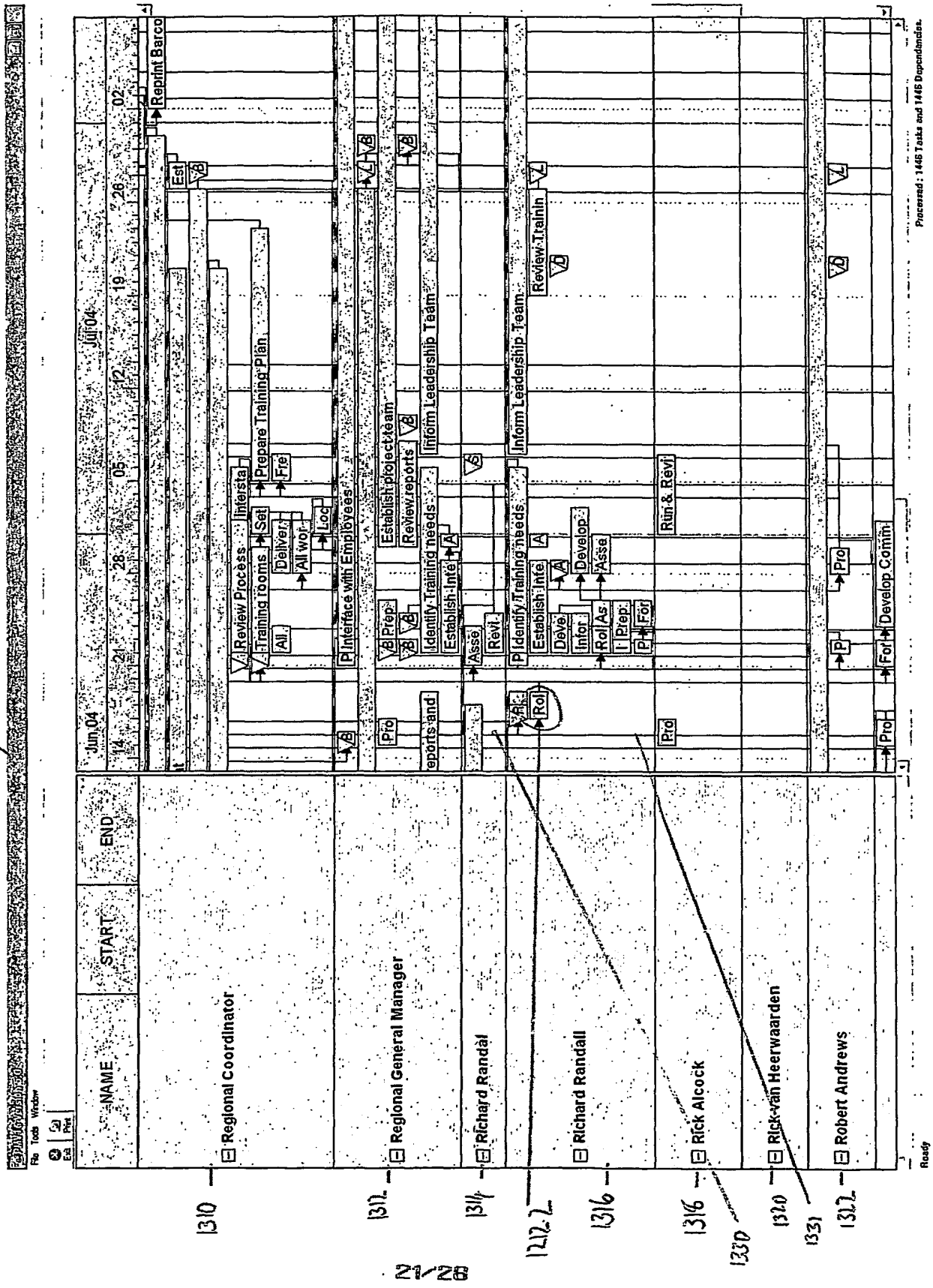
1300
NAME
START
END
Jun 04
Jul 04
Regional Coordinator
Regional General Manager
Richard Randall
Richard Randall
Rick Alcock
Rick van Heerwaarden
Robert Andrews
1310
1312
1314
1212.2
1316
1316
1330
1320
1331
1312

FIG. 14

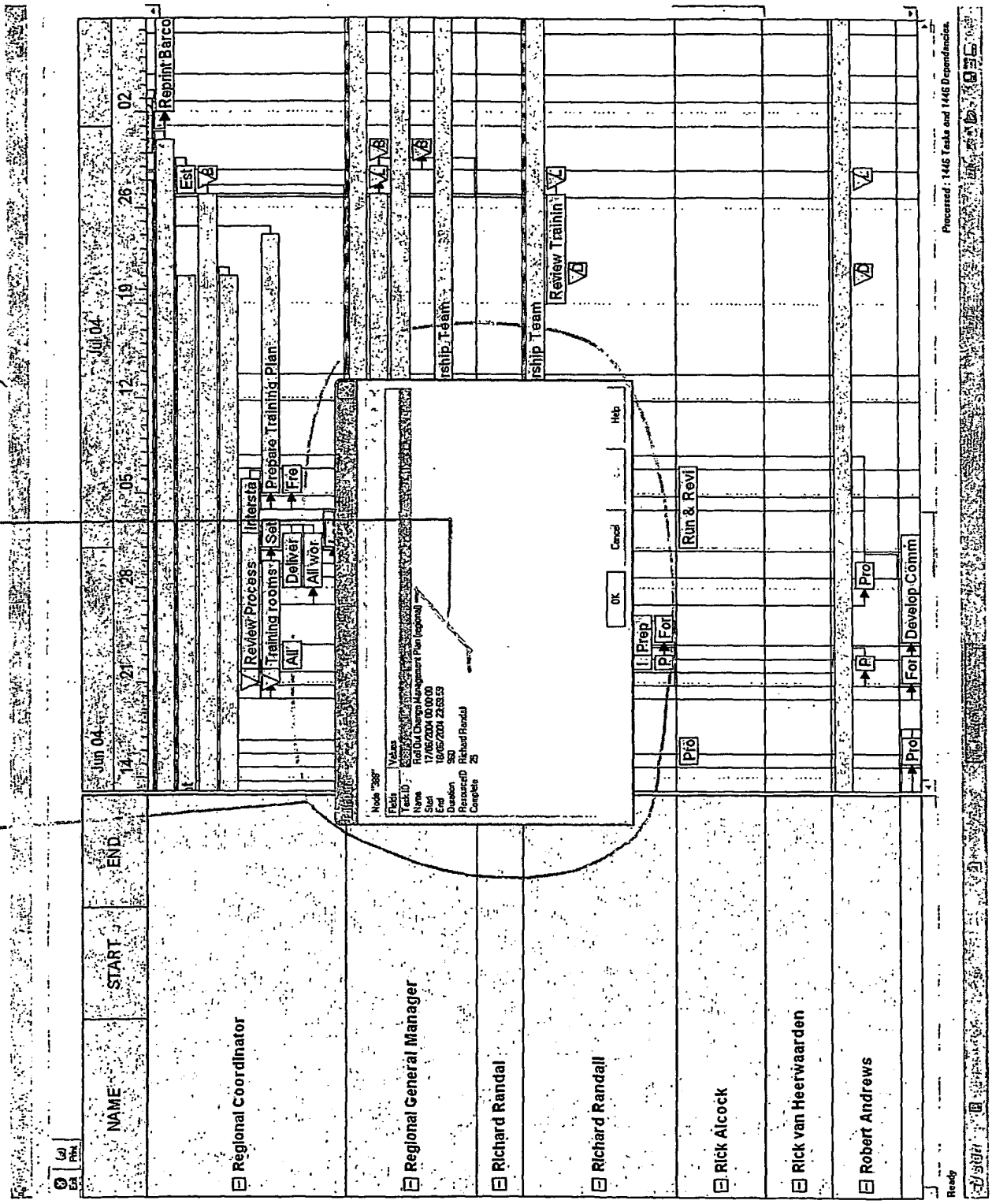
1400
1404
1402
NAME
START
END
Regional Coordinator
Regional General Manager
Richard Randal
Richard Randall
Rick Alcock
Rick van Heerwaarden
Robert Andrews
Review Process
Training rooms
Prepare Training Plan
Review Trainin
Develop Comm
Reprint Barco
Jun 04
Jul 04
OK
Cancel
Help
Ready

FIG. 15

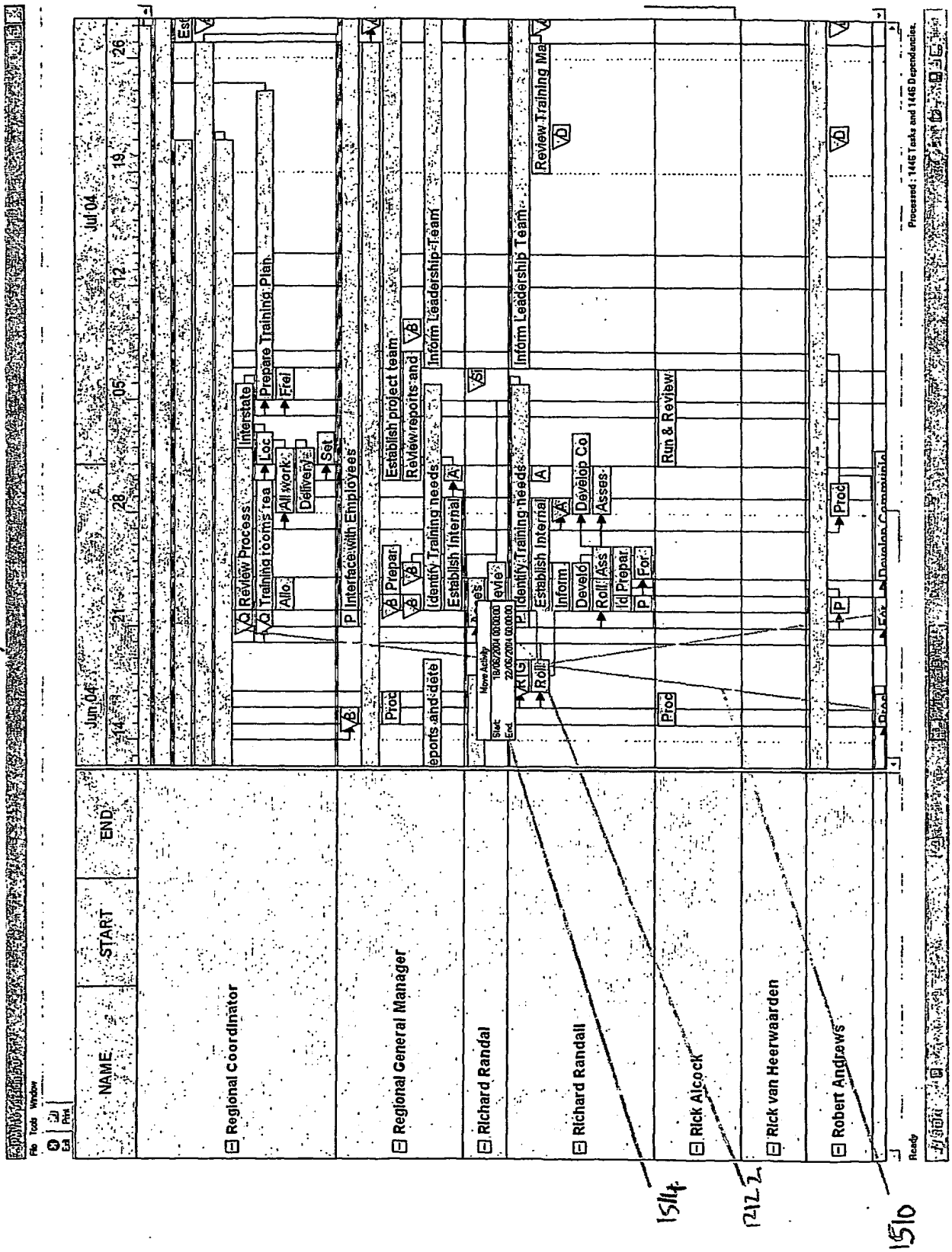
1503
NAME
START
END
Jun 04
Jul 04
Regional Coordinator
Regional General Manager
Richard Randal
Richard Randall
Rick Alcock
Rick van Heerwaarden
Robert Andrews
Review Process
Prepare Training Plan
Establish project team
Review/repoits and
Inform Leadership Team
Identify Training needs
Establish Internal
Develop Co
Run & Review
Review Training Ma
1514
1512
1510

FIG. 16

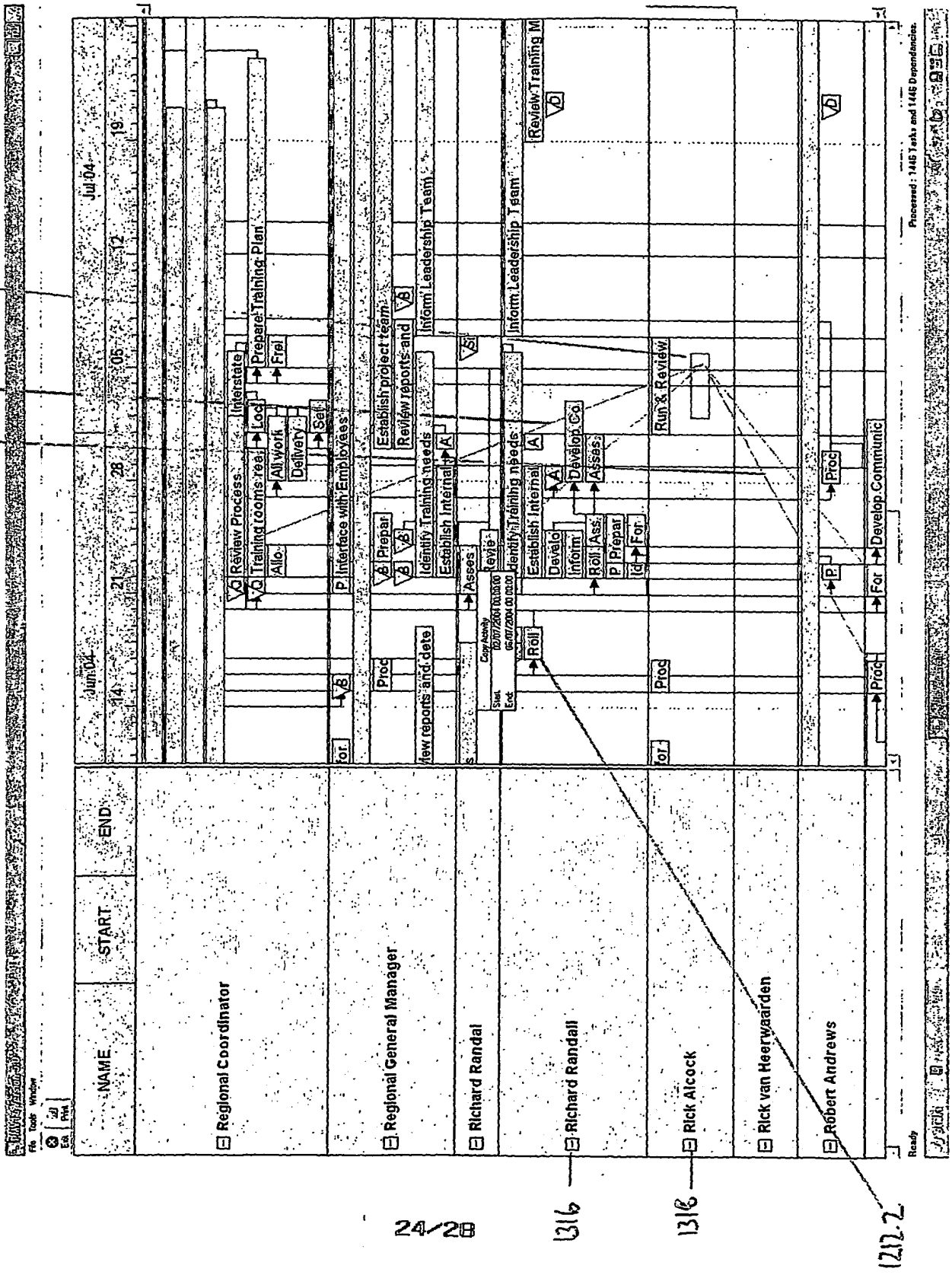
1644
1640
1642
1212
1316
1318
NAME
START
END
Jun 04
Jul 04
Regional Coordinator
Regional General Manager
Richard Randall
Richard Randall
Rick Alcock
Rick van Heerwaarden
Robert Andrews
Review Process
Interstate
Prepare Training Plan
Training rooms reqi
Lod
Frei
Allo
All work
Delivery
Sel
Interface with Employess
Establish project team
Review reports and
Identify Training needs
Establish Internal
Inform Leadership Team
Review Training M
Develop Co
Assess
Run & Review
Develop Communic
Proc
Ready

FIG. 17

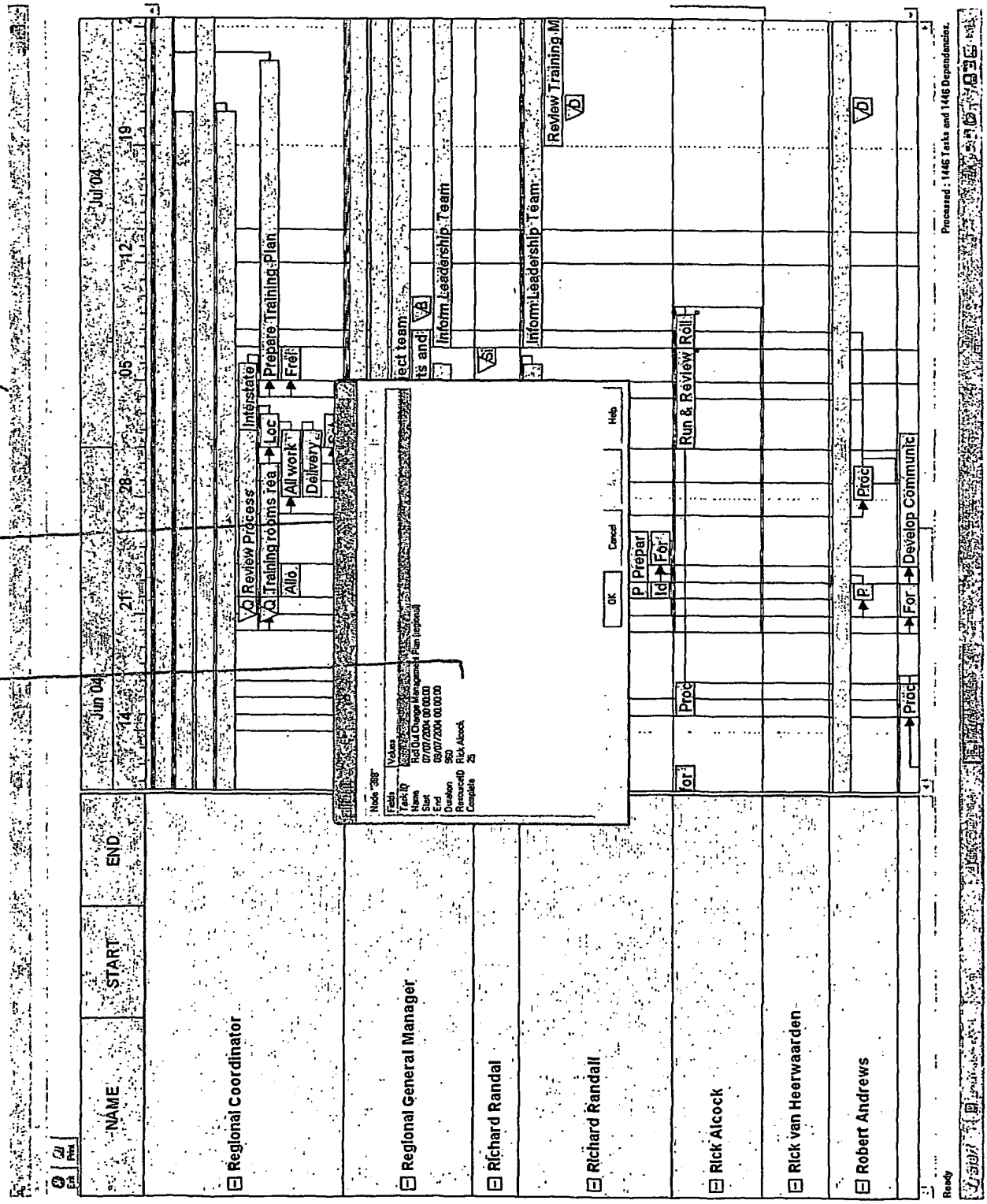
1700
1704
1706
NAME
START
END
Regional Coordinator
Regional General Manager
Richard Randal
Richard Randall
Rick Alcock
Rick van Heerwaarden
Robert Andrews
Review Process
Training rqmts rea
Allo
Interstate
Loc
All work
Delivery
Prepare Training Plan
Frei
Inform Leadership Team
Review Training M
Run & Review Roll
Develop Communic
OK
Cancel
Help
Ready

FIG. 18

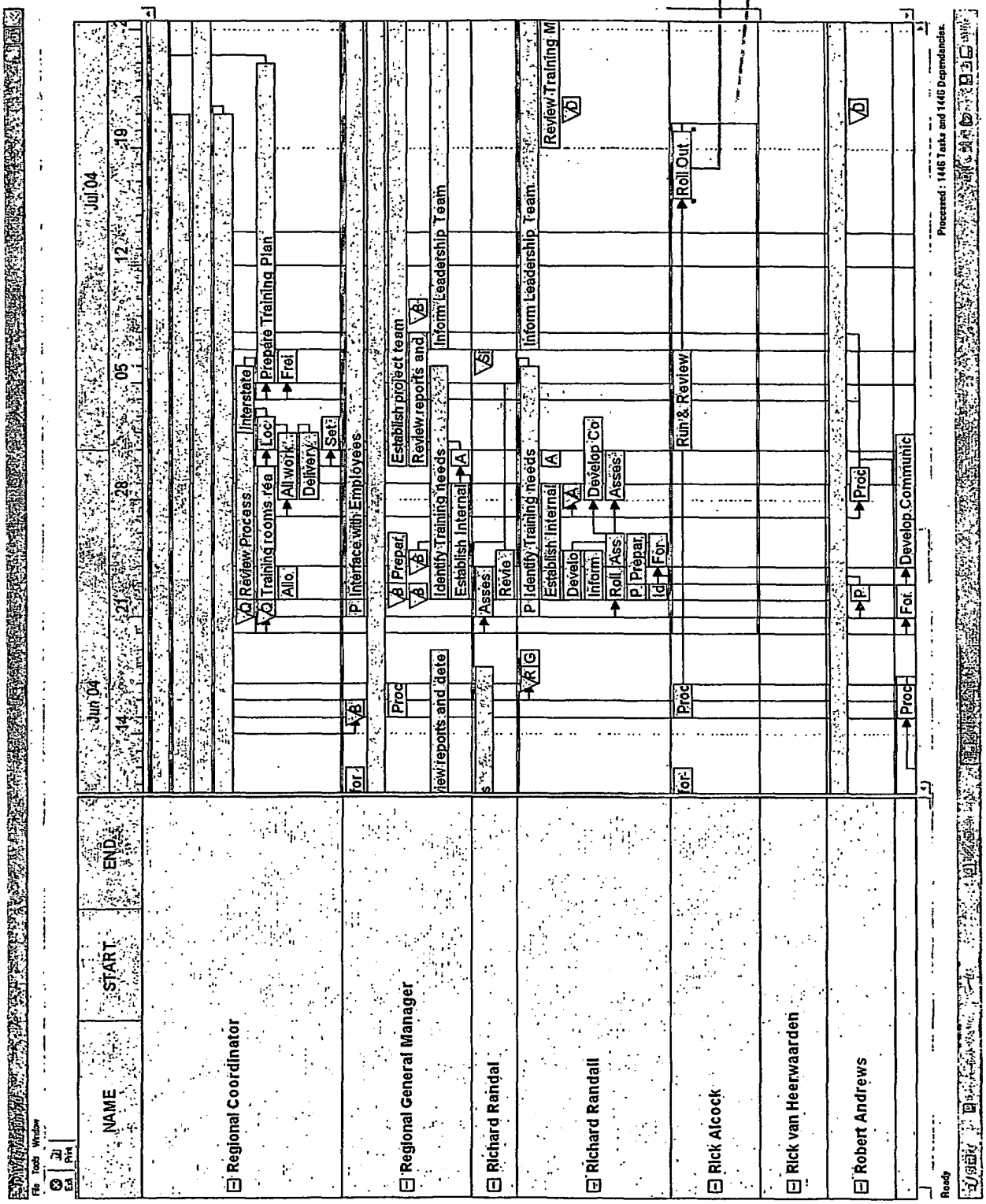
1602
1612
1606
NAME
START
END
Jun 04
Jul 04
Regional Coordinator
Regional General Manager
Richard Randal
Richard Randall
Rick Alcock
Rick van Heerwaarden
Robert Andrews
Review Process
Training rooms rea
Allo
All work
Delivery
Set
Interstate
Loc
Prepare Training Plan
Frei
Interface with Employees
Establish project team
Review reports and
Identify Training needs
Establish Internal
Inform Leadership Team
Review Training M
Develo
Inform
Roll Ass
Develop Co
Assas
Run & Review
Roll Out
Develop Communic
Proc
Ready

FIG. 19

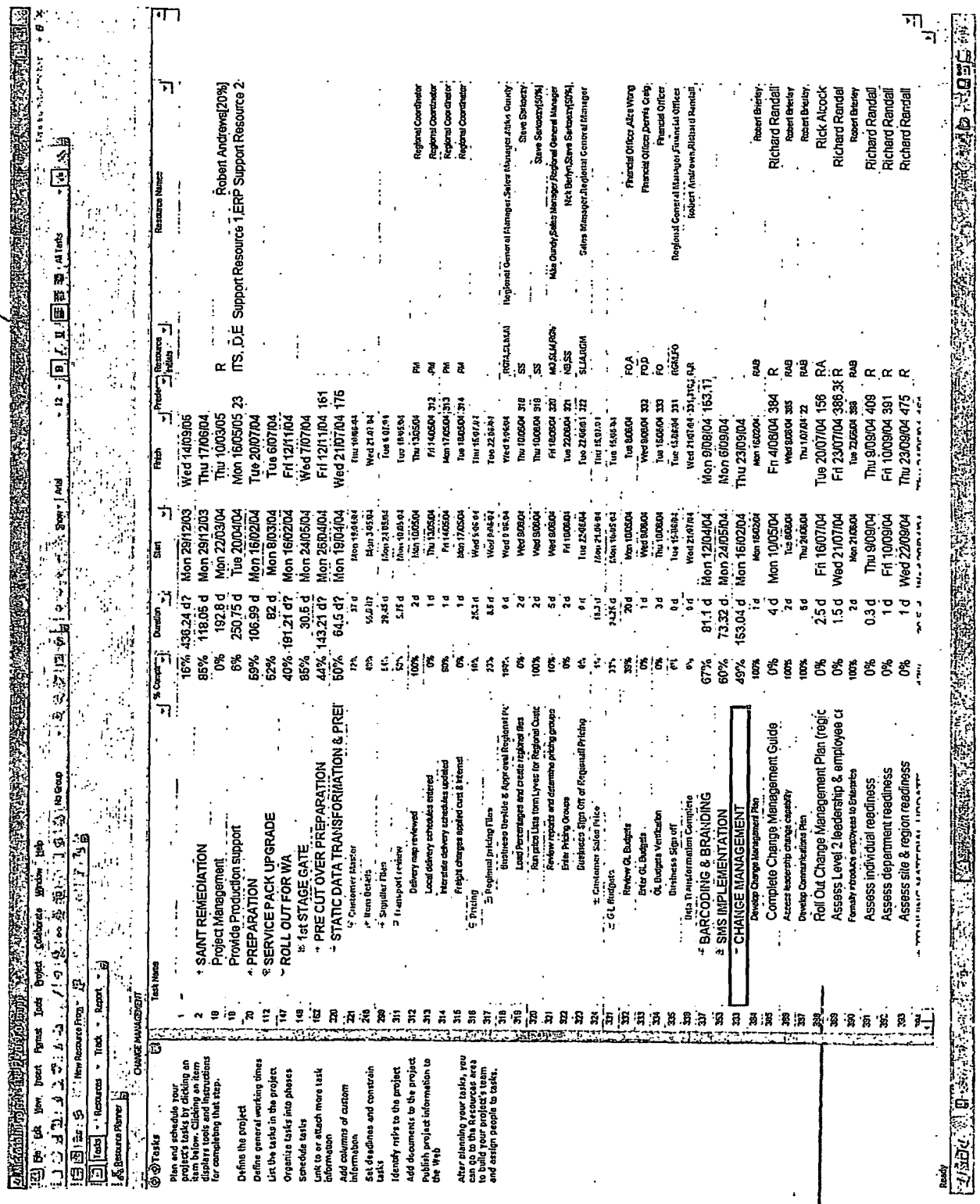
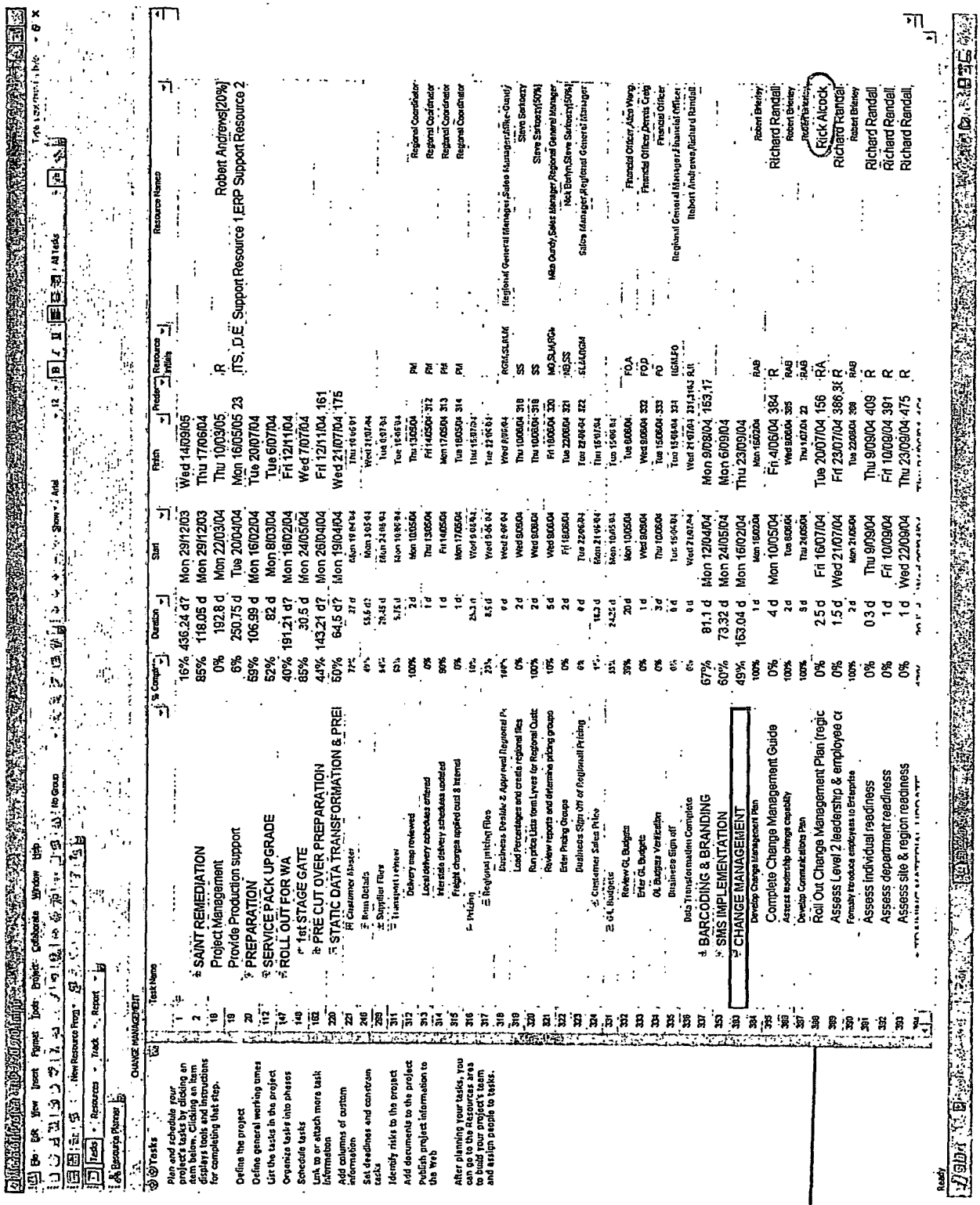
FIG. 20